



Summer Math Students Entering Grade 4 - July

Complete **at least** 12 of the activities below for July. As you complete each activity color in the sun.

Additional information and activities can be found at: <https://sites.google.com/a/franklinps.net/math-k-5/home/summer-math>

Help make something in the kitchen and talk about all the math involved with measuring, portions, estimating, counting, multiplying, dividing, timing, etc.		Read – <u>Pigs Will be Pigs: Fun with Math and Money</u> by Amy Axelrod. Get a menu from a restaurant and add up what it would cost for your family to eat there.	
Have somebody time you for 2 minutes. Count how many jumping jacks you can do. Take a rest and repeat. What is the difference between the first and second time?		Happy Birthday USA! The USA was born in 1776. How many years ago was that? What year will our nation be 250 years old? 300 years old?	
Find out what time the sun rises and sets each day this week. Use that data to figure out how much daytime we get each day. Is the amount of daytime getting longer, shorter or staying the same? Continue to check about once a week to see if the pattern continues.		The world record for paper airplane flight is 226 feet 10 inches. How close can you come to breaking the record? The longest an airplane has stayed in the air is 29 seconds. Can you break that record? What shapes are in your paper airplane?	
Use sidewalk chalk to draw an interesting picture that includes at least 1 rectangle, 1 triangle and 1 square that are all symmetrical.		Speed Multiplication War! Each player turns over a card, first person to say the product of the 2 cards wins. If it is a tie to say the product then it is a war.	
I went to the beach on 4 different days and collected a total of 100 shells, but I never collected the same amount twice. What are some different combinations of shells I could have found in 4 days that would give me a total of 100 shells?		When I played “Speed Multiplication War” I turned over 2 cards less than 5 and their product was an even number. What are all the combinations of cards I could have turned over?	
Multiplication Hunt! Look around your house and yard for things that are in groups and make up stories. <i>4 wheels on a car, if I had 3 cars how many wheels in all?</i>		I made 24 water balloons that I want to put in equal piles. How many different ways can I pile the balloons so there is always an equal number in each group?	
Find 4 numbers larger than 1,000 in a newspaper or magazine. Put them in order from least to greatest. What is the difference between the smallest and largest numbers?		The world record for spinning a coin is 25 seconds. How close can you come to breaking the record? Which coins can you get to spin the longest?	
Roll 2 dice and multiply the numbers. Do this at least 25 times. Keep track of the products using a line plot graph. Do you notice any patterns in the results?		A firefly in my backyard glows 20 times every minute. How many times would he glow in 5 minutes? 10 minutes? 1 hour?	
Close to 20! Deal 5 cards to each player (ace=10). Choose 3 of your cards and use any operation (\times , \div , $+$, $-$) to get close to 20. Closest to 20 wins that round. Tie everyone wins.		Jen multiplied $2 \times 3 \times 10$ and Madison multiplied $3 \times 10 \times 2$. Will they get the same answer? Does this always work when multiplying 3 numbers? Why?	
The tallest sunflower in the world grew to be 9 yards tall. How many inches tall is the sunflower? Draw a line 9 yards long outside. Hint: 3 feet = 1 yard.		Grab a handful of coins and count them starting with the smallest coins, then count again starting with the biggest coins. Which is easier? Why?	
What is the sum of the dates of all the Wednesdays in July? Try to solve it mentally? What strategies did you use? Will you get the same answer in August?		Fold a paper in half. How many sections do you get? Fold it twice, how many do you get? 3 times? 4? 5? How many times can you fold a paper in half?	
Estimate the length of a popsicle stick in inches and cm. Measure it to find out how close you were. What outside might be an inch, foot and yard long? Measure to check.		Read - <u>The \$1.00 Word Riddle Book</u> by Marilyn Burns. What is your name worth? What is the most expensive word you can make?	
Free choice math activities. Did you do some math activities on your own that aren't listed here?		Summer Math Fact Challenge – Practice your math facts for 5 minutes 4 times a week in July.	

My child has completed at least 12 of the activities for July.

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How fast can you count from 0 to 44 counting by 4's? Have somebody time you. Try it again each day this week and see if your time improves. Try with other numbers.		Read – Picture Pie by Ed Emberley. Look closely at the artwork. Create your own picture by tracing around fraction circle pieces. You can get the circle pieces on http://edemberley.com/pages/main.aspx?section=febActivities	
Go outside on a clear night and try to count as many stars as you see. Sometimes people imagine shapes, like animals or people, being created by stars, or constellations. What numbers and shapes can you make by connecting the stars?		Game! 2 players take a card and without looking put it on their forehead. A third person calls the product of the 2 cards. First player to name their card become the caller.	
Fraction Hunt! Look around your house, especially your kitchen, for fractions. Where else can you find fractions?		Play a board game that involved math. Scrabble is a great game that involves math and reading.	
A United States quarter is about an inch wide. How much would a foot of quarters be worth? How much would your foot length be worth in quarters? Your height?		Write down the year each member of your family was born. Put them in order from earliest to latest. What year will each person be 100?	
How close can you get to a bird before it flies away? Try it 10 times and when it flies away keep track of how many steps away you were. Is there a pattern?		NIM! – Start with 13 objects. Each person can take away 1 or 2 items. The person to take away the last object loses. Try it with a different start number	
There are over 200 ways to make exactly \$1.00 with quarters, dimes, nickels, and pennies! Wow! Can you find at least 10 ways?		Time yourself to see how many times you can make a hula hoop go around in 2 minutes. How many more or fewer times can you do it if you try again?	
Greg built a rectangular garden with an area of 48 sq. ft. and a perimeter of 28ft. David also built a rectangular garden with an area of 48sq. ft. but his perimeter was different. What are some dimensions David could have for his garden?		Use cereal or other small objects to make an array that shows 6 x 8. What are the 4 facts your array shows? Make a 12 x 4 array. What do you notice about the arrays?	
Before a long car trip find out how many miles are on the odometer of the car. After the trip take a look at the odometer again and figure out how many miles you traveled.		Find out how much it would cost take make s'mores for your family. You will need a box of graham crackers, marshmallows, and chocolate bars.	
Go on a 3-D shape hunt in your house and neighborhood. Look for cubes, cones, cylinders, and rectangular prisms? What did you find the most of?		How many times can you hop on 1 foot in a minute? If you kept up with that pace how many hops could you do in 10 min? Try your other foot to compare.	
Play a game that you have at home that uses strategy, such as Connect 4, and not just luck. What strategy did you use? What strategy will you use next time?		Write a summer word problem whose answer is 12. Have someone solve the problem. Choose another answer and make up another problem.	
Toasted Marshmallow Day! What shape is a marshmallow? If everybody in your family ate 20 mini-marshmallows, how many would that be altogether? What shape are marshmallows?		The slowest snails in the world moves at a speed of about 22 inches an hour. How many inches would they move in $\frac{1}{2}$ an hour? In 2 hours? In 10 hours? How far can you walk in an hour?	
Read – The Doorbell Rang by Pat Hutchins. Suppose you had 32 cookies. How many friends could you share them with so that you had an equal number of cookies with none leftover? Show as many different ways as you can to share the cookies equally.		Use your sidewalk chalk to write a giant 20 outside. Next write creative ways to make 20 ex. $(6 \times 5) - 10$. Invite your friends and family to add their own creative ways.	
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